

WHAT IS CLAIMED IS:

- 1 1. A method for communicating, comprising:
2 receiving a first signal over a wireless link;
3 determining one or more first status conditions associated with the wireless link
4 based on the first signal; and
5 receiving one or more first segments from a first channel of the wireless link
6 having a format, wherein the format is determined based on the one or more first status
7 conditions.
- 1 2. The method of claim 1, wherein the format includes a first segment size.
- 1 3. The method of claim 2, further comprising transmitting first status
2 information over the wireless link.
- 1 4. The method of claim 3, wherein the first status information includes at
2 least one first status condition.
- 1 5. The method of claim 3, further comprising determining the first segment
2 size.
- 1 6. The method of claim 3, wherein the first status information includes at
2 least an indication of the first segment size.
- 1 7. The method of claim 3, wherein the wireless link is based on a continuous
2 communication technique.
- 1 8. The method of claim 3, further comprising:
2 receiving first data from a wired network; and
3 packaging the first data into the one or more first segments.
- 1 9. The method of claim 3, further comprising:
2 receiving first data from a wireless device; and
3 packaging the first data into the one or more first segments.
- 1 10. The method of claim 9, wherein the wireless device is a mobile wireless
2 device.
- 1 11. The method of claim 3, further comprising sending a first
2 acknowledgment for at least one first segment over the wireless link.
- 1 12. The method of claim 11, wherein the one or more first segments are based
2 on transmission control protocol (TCP).

- 1 13. The method of claim 3, further comprising:
2 determining one or more second status conditions associated with the wireless
3 link; and
4 receiving one or more second segments from the first channel of the wireless link
5 having a second segment size, wherein the second segment size is determined based the
6 one or more second status conditions.
- 1 14. The method of claim 13, wherein at least one of the first status condition is
2 based on at least an error rate associated with the first channel.
- 1 15. The method of claim 13, wherein at least one of the first status condition is
2 based on at least a signal level associated with the first channel.
- 1 16. The method of claim 15, wherein the one first status condition is further
2 based on at least one of a noise level associated with the first channel and an interference
3 level associated with the first channel.
- 1 17. The method of claim 14, wherein the one first status condition is further
2 based on at least a rate of change of an error parameter.
- 1 18. The method of claim 13, wherein the wireless link is a cellular link..
- 1 19. The method of claim 13, wherein the wireless link is a satellite-based link.
- 1 20. The method of claim 13, wherein the first segment size is determined
2 based on at least one first status condition associated with the first channel, and wherein
3 the second segment size is determined based on at least one second status condition
4 associated with the first channel.
- 1 21. The method of claim 9, further comprising:
2 extracting the first data from the one or more first segments; and
3 transmitting one or more wired segments over a wired network, wherein the one
4 or more wired segments contain the first data extracted from the one or more first
5 segments, and wherein the size of at least one the wired segments is different that the size
6 of at least one of the first segments.
- 1 22. The method of claim 3, wherein the one or more first segments contain
2 data received from a wired network.
- 1 23. The method of claim 3, wherein the one or more first segments are
2 provided to a wired network.

- 1 24. A wireless device, comprising:
2 a first interface that receives first data;
3 a segment forming device that packages the first data into one or more first
4 segments, wherein the size of the first segments is based on one or more first status
5 conditions; and
6 a wireless interface that transmits the one or more first status conditions to a
7 remote device using a wireless link.
- 1 25. The device of claim 24, further comprising a status device that determines
2 the size of the first segments.
- 1 26. The device of claim 25, wherein the one or more first status conditions are
2 received from the remote device over the wireless link
- 1 27. The device of claim 24, wherein the size of the first segments is
2 determined by the remote device.
- 1 28. The device of claim 24, wherein the wireless link is based on a continuous
2 communication technique.
- 1 29. The device of claim 24, wherein the wireless device is a mobile wireless
2 device.
- 1 30. The device of claim 24, wherein the first interface is coupled to a wired
2 network and the first data is received from the wired network.
- 1 31. The device of claim 24, wherein the wireless interface receives one or
2 more wireless segments.
- 1 32. The method of claim 25, further comprising an acknowledgment device
2 that generates an acknowledgment signal in response to a received wireless segment.
- 1 33. The method of claim 32, wherein the received wireless segments are based
2 on transmission control protocol (TCP).
- 1 34. The method of claim 24, wherein at least one of the first status condition is
2 based on at least an error rate associated with the wireless link.
- 1 35. The method of claim 24, wherein at least one of the first status condition is
2 based on at least a signal level associated with the wireless link.

1 36. The method of claim 35, wherein the one first status condition is further
2 based on at least one of a noise level associated with the wireless link and an interference
3 level associated with the wireless link.

1 37. The method of claim 35, wherein the one first status condition is further
2 based on at least a rate of change of an error parameter.

1 38. The method of claim 34, wherein the wireless link is a cellular link.

1 39. The method of claim 34, wherein the wireless link is a satellite-based link.

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